REMARKS

By this amendment, claims 1, 4, 7-17, 19-23, 26, 29, 32-39, 41-44 and 56-74 are currently pending in the subject application. Claims 1, 4, 7-17, 19-23, 26, 29, 32-39 and 41-44 stand rejected. Claims 1, 4, 7-9, 23, 26, 29, 32-39 and 41-44 have been amended. New claims 56-74 have been added. Favorable reconsideration of the application is requested in view of the amendments and comments herein.

I. Interview Summary

Applicant appreciates the courtesy extended to Applicant's representative, Gary J. Pitzer, during a telephone interview on November 3, 2008. During the interview claim 1 was discussed relative to the teachings of U.S. Patent No. 6,305,019 to Dyer et al. (hereinafter, "Dyer"). Several differences between the teachings of Dyer, as applied in the Office Action, and the claims were discussed, including many deficiencies between what is expressly recited in claim 1 and what is disclosed in Dyer. While no official agreement was reached regarding the allowance of any claims, the Examiner stated that he would carefully look at the process being claimed relative to the art of record. The amendments made herein, including the addition of new claims 56-74, are based on the understandings from the telephone interview.

II. Rejection of Claims 1, 4, 7-17, 19-23, 26-39, 41-44 under 35 U.S.C. 103(a)

Claims 1, 4, 7-17, 19-23, 26-39, 41-44 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Dyer et al. in view of U.S. Patent No. 6,088,346 to Du, et al. (hereinafter, "Du").

Various claims have been amended to clarify certain functional and structural features. Claims 26, 29, 32-39 and 41-44 have also been amended to make the preambles of these claims consistent with the preamble of base claim 23 that had been previously amended.

As discussed during the telephone interview with the Examiner, the Office Action relies heavily on Dyer as allegedly teaching many features recited in claim 1. Specifically, the Office Action cites to Col. 4, lines 12-26 and lines 31-59; Col. 6, line 37+ through Col. 7, line 28; Col. 7, lines 48+; and Col. 8, lines 27-67. These exact sections of Dyer have been cited in the Office Action to support various different features recited in claim. However, as agreed during the telephone interview, a careful review of Dyer demonstrated that these sections of Dyer do not

demonstrate facts that support the claimed features for which they have been cited in the Office Action. Many shortcomings of these cited sections were discussed in further detail in Applicant's response of April 30, 2008. Conceptually, the Office Action in its reliance on Dyer for its processing and transmitting of packetized streams, fails to appreciate that Dyer's teachings of the terminal identifier (TID) and how the data streams are processed by the video session manager relates to a high level of processing a given data stream to a given subscriber. In contrast, the recited appending, processing, copying and stripping relate handling of individual packets. The simplistic mention in Dyer that information to subscribers can be broadcast, pointcast or narrowcast (Dyer, Col. 4, lines 20-26) provides no teaching or even a suggestion of the particular method recited in amended claim 1. Significantly, the description of the video session manager 106 in Dyer (Col. 8, beginning at line 27) teaches a general approach of routing streams of packetized data and fails to mention any details that remotely suggest the method of claim 1. Therefore, as discussed with the Examiner, Dyer does not provide credence to the obviousness position asserted in the Office Action with respect to what is recited in claim 1.

The amendments to claim 1 further demonstrate that an interrelationship between unicast and multicast buffers, there being a unicast buffer associated with each of the plurality of modulators of the multimodulator. Additionally, amended claim 1 recites that packets retrieved from the multicast buffer are copied depending on from how many of the plurality of modulators the multicast packet is to be transmitted. This implies that a single multicast packet can be stored in the multicast packet and copied as indicated by the data unit header, which can reduce memory and processing power needed for multicast packets. See, *e.g.*, page 26, lines 3-7 of the instant application, as filed. Moreover, in contrast to any teaching in Dyer, the data unit header is stripped from each packet prior to transmission. Another feature of amended claim 1 that distinguishes Dyer is that at least some of the appending, providing, copying and stripping is performed at the multimodulator, which receives the packetized transport stream. As explained during the telephone interview, it is a server 102 in Dyer packetizes the data and adds the program ID (PID) and the terminal ID (TID) for messages being transmitted. Even if the optional packetizer 206 were included in the modulator 208, such packetizing is disclosed for packetizing the information according to a transport protocol. Dyer, Col. 8, lines 44-53.

Regardless how packetization occurs, Dyer is silent as to any appending or stripping of a data unit header, and providing packets to unicast and multicast buffers, as recited in claim 1.

The Examiner relies on Du to remedy certain admitted deficiencies of Dyer relating to copying the determined multicast packets depending upon how many of the plurality of modulators. However, the addition of Du fails to cure the numerous deficiencies of Dyer discussed above and in the prior Response dated April 30, 2008. Applicant further submits that there is not proper motivation to combine Du with Dyer as suggested in the Office Action. Moreover, even if such references were combined, which Applicant maintains would be improper, one of ordinary skill in the art would not deem the method of claim 1 to be predictable based on the combined teachings.

Significantly, Du teaches routing signals around a network in an asynchronous transfer mode within a ring. In this manner, intervening devices buffer incoming signals and, based on clock signals, transmit the signals to the next device. This contradicts Dyer's parallel processing system (col. 7, lines 33-37) that is capable of providing a plurality of program streams at one time via difference DVMs. Consequently, there would be no reasonable expectation of success to combine the copying used in Du's asynchronous (or serial) processing system into Dyer's parallel processing system to implement to provide the method of claim 1. Any position to the contrary would be based on improper hindsight in which the present application is used as guide to modify Dyer and Du beyond any teaching in these references.

For these reasons and the reasons, Dyer in view of Du fails to teach or suggest what is recited in amended claim 1. The Office Action provides no other evidence or legal reasoning sufficient to support its obviousness position. Therefore, claim 1 is not obvious over Dyer in view of Du. Claims 4, 7-17, 19-22 and new claims 56-58 depend from claim 1 and are patentable for at least the same reasons as claim 1.

Additionally, claim 7 recites that an output buffer is associated with each of the modulators, thus explicitly differentiating the output buffer from the unicast and multicast buffers introduced in claim 1. Such a concept is not taught or suggested in Dyer or du, taken in individually or in combination.

Claim 8 has been amended to be consistent with the amendments to claim 1.

Claim 9 has been amended to correct an inadvertent typographical error. Claim 9 further recites additional features associated with how the method determines whether to check one of the unicast buffers or multicast buffer. This additional functionality is not taught or suggested in Dyer. In contrast to the suggestion in the Office Action, each of the buffers 73 taught in Du is associated with each terminal, and no distinction is made as to which buffers may be unicast buffers and multicast buffers. Instead, Du explicitly teaches that a multicast connection is copied to the buffers in accordance with the number of connections defined by the multicast connection. Accordingly, the addition of Du fails to make up for the admitted deficiencies of Dyer (See Office Action, last paragraph at page 8).

Claims 10-13 depend from claim 9 and provide additional features relating to the method of claim 9, which combination of features are not taught or suggested in the combination of Dyer and Du. Claims 17 and 19-22 refines the method of claim 1 where a second transport stream is received at the multimodulator. Similar to as discussed above with respect to claim 1, a careful analysis of the various sections of Dyer in the Office Action demonstrates that the evidence being relied on to support the obviousness position is insufficient since it does not establish facts being asserted. Additionally, no other evidence or rational underpinning has been presented in the Office Action that is sufficient to support the legal conclusion of obviousness.

For the reasons discussed above, reconsideration and allowance of claims 1, 4, 7-17, 19-22 are respectfully requested.

Claim 23 has been amended to be consistent with many of the amendments to claim 1. Amended claim 23 thus now recites a particular relationship between a plurality of unicast buffers and modulators, as well as a multicast buffer. Additionally, claim 23 recites that each multicast packet is copied from the multicast buffer for transmission depending on the number of transmitting modulators identified in the data unit header thereof. Thus, claim 23 is patentable for reasons similar to those explained above with respect to claim 1. Dependent claims 26, 29, 32-39 and 41-44 have been amended to make the preambles of these claims consistent with the preamble of base claim 23 that had been previously amended in Applicant's Response dated April 30, 2008. These dependent claims are patentable for similar reasons to claim 23 from which they depend and for the additional features recited in such claims.

Reconsideration and allowance of claims 23, 26, 29, 32-39 and 41-44 are respectfully requested.

III. New Claims

New claims 56-58 depend from claim 1 and are patentable for at least the same reasons discussed herein with respect to claim 1.

Claims 56-58 further recite additional structural and functional features that are not taught or suggested in Dyer or Du, taken individually or in combination. For instance, similar to claim 7, claim 56 recites that an output buffer is associated with each modulator, and that packets from the multicast buffer are copied into output buffers according to which of the plurality of modulators are identified in the data unit header.

Claims 57 introduces the processing that was previously recited in claim 1. Claim 58 recites that encryption is performed based on the data unit header.

Allowance of dependent claims 56-58 is respectfully requested.

Claims 59-74 is a new claim set drafted based on the telephone interview with the Examiner. Independent claim 59 recites several functional features similar to amended claims 1 and 23, but does so using language according to what is shown and described with respect to the multimodulator of FIG. 7A of the present application. Support for these new claims 59-74 can be found, for example, in the description of FIG. 7A and related FIGS. 8-11 of the present application, as well as in previously presented claims 1, 4, 7-17, 19-23, 26, 29, 32-39 and 41-44.

In sharp contrast to Dyer and Du, the multimodulator of claim 59 recites memory that includes both unicast and multicast buffers as well as output buffers associated with each of the plurality of modulators. The multimodulator of claim 59 also includes a packet handler that appends the data unit header to packets that have been determined to be transmitted. The packet handler also retrieves a data unit packet from one of the unicast buffers or the multicast buffer. Retrieved data packets are stored in one or more of the output buffers as indicated by the data unit headers of the retrieved packets. Dependent claims 60-74 recite additional features of the multimodulator that are not taught or suggested in the art of record.

Applicant respectfully requests consideration and allowance of new claims 59-74.

IV. CONCLUSION

In view of the foregoing remarks, Applicant respectfully submits that the present application is in condition for allowance. Applicant respectfully requests reconsideration of this application and that the application be passed to issue.

Should the Examiner have any questions concerning this paper or if the Examiner has any suggestions to advance this application to allowance, the Examiner is invited and encouraged to contact Gary J. Pitzer at (216) 621-2234, Ext. 106.

Because Applicant has previously paid for 55 total claims and 3 independent claims, 23 of which claims have been cancelled, Applicant submits that no additional fee is due for the amendments herein, including new claims 56-74. In the event any fees are due in connection with the filing of this document, the Commissioner is authorized to charge those fees to Deposit Account No. 19-0761.

I hereby certify that this correspondence is being transmitted to the U.S. Patent and Trademark Office via electronic filing on November 7, 2008.

Respectfully submitted,

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